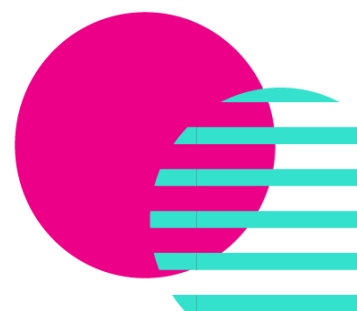




# **Welding Skills**

## **MMA (Manual Metal Arc) Welding**



## Introduction

NOCN is a market-leading awarding organisation that has been providing qualifications, assured short courses, various courses for a wide range of centres, including FE colleges and training providers, for 30 years both in the UK and internationally.

We work with centres to deliver a high quality and flexible service for learners to underpin our passionate belief in the power of education and its impact on communities and individuals.

We offer all the advantages of being with a national awarding organisation with a diverse portfolio of qualifications, alongside providing a personalised, bespoke, service to our centres and learners.

As an accredited Leader in Diversity, we are proud of our reputation as a provider of fully accessible, trusted, and flexible qualifications.

## About NOCN Group

NOCN is part of NOCN Group, a progressive educational charity whose core aims are to help learners reach their potential and organisations thrive. The group includes business units specialising in regulated UK and international qualifications, end point assessment, endorsed programmes and assured short courses, Smart job cards, assessment services, consultancy, and research.

NOCN Group shares a joint purpose to offer learners, training providers, employers, and FE Colleges a fully integrated range of learning and skills development products and services.

Information about all our courses and qualifications is available from our website:

[www.nocn.org.uk/](http://www.nocn.org.uk/)

## Course Specification

NOCN Group have produced this Short Course to promote the fundamental understanding for MMA Welding and demonstrate the associated skills to produce welds to a high standard.

The course aims to provide individuals with a knowledge and understanding of MMA Welding, including the Health and safety requirements, specific process requirements and the treatment of metals used in MMA welding. The course then gives candidates the opportunity to demonstrate their welding skills by completing two common welds using the MMA process.

This course will benefit both newly qualified and experienced welders particularly those working in Metal Fabrication or have not achieved their coding as its not been a requirement within their role.

The outline, structure and content of this course is assured by NOCN Group and industry experts have been involved in the development of the content.

### Course Content / Objectives (examples)

- Health and Safety Requirements of MMA welding
- Associated Risks of MMA welding
- Process specific requirements of MMA Welding
- Destructive Testing
- Key Material Properties
- Common Weld Defects
- Produce High Quality Welds in common position and Joint types

### Course Approval

Prior to advertising or delivering this Assured Course, organisations must first gain Centre Approval from NOCN as well as gaining approval for each individual Assured Course. For further information regarding gaining approval, please contact the NOCN Onboarding Team at [onboarding@nocn.org.uk](mailto:onboarding@nocn.org.uk).

### Approval, Readiness, Deliver and Certification Process



### Trainer Requirements

A trainer is required to deliver this course. A trainer includes anyone within your Centre who is facilitating the training to learners in any environment e.g. tutor, trainer, teacher, coach, facilitator. That individual can also perform the role of Assessor for this course.

All trainers and assessors must:

- Hold verifiable knowledge of the occupational standards at or above the level being taught, and it is recommended but not mandatory that it includes being a coded welder in the process being taught.
- Hold or be working towards a recognised teaching/training or assessor qualification (dependent on their role), examples of what NOCN will accept are detailed within the Quality Assurance Manual.
- Keep up to date with industry best practice for the duration of their role.
- Maintain a record of Continuous Personal Development (CPD).
- Hold an up-to-date CV.

Please refer to the Assured Course Quality Manual, available on the NOCN website for further tutor requirements.

### Resource and Equipment Requirements

In order to deliver the course, the Centre must have access to and make use of the following resources and equipment:

Requirement	Detail
<b>Training Environment</b>	<ul style="list-style-type: none"> <li>• <b>Blended learning</b></li> </ul>
<b>Tools/Equipment</b>	<ul style="list-style-type: none"> <li>• <b>Course Presentation</b></li> <li>• <b>Projector / Laptop</b></li> <li>• <b>Flipchart and pens</b></li> <li>• <b>Learner Workbook</b></li> <li>• <b>Welding bays set out with all equipment as described in the practical assessment guidance document</b></li> </ul>
<b>Personal Protective Equipment (minimum)</b>	<ul style="list-style-type: none"> <li>• <b>Full PPE has required to complete a MIG weld including Helmet, Safety Glasses/Goggles, Gloves, Jacket/Apron, Welding Boots</b></li> <li>• <b>No Assessment should begin without a full PPE sign off</b></li> </ul>
<b>Delivery</b>	<ul style="list-style-type: none"> <li>• <b>PowerPoint presentation</b></li> <li>• <b>Workbook</b></li> </ul>

Testing	<ul style="list-style-type: none"><li>• <b>Workbook</b></li><li>• <b>Practical Assessment</b></li></ul>
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### Course Structure

The course is split between knowledge and skills and each have their overarching learning objectives:

- To know the process and health and safety requirements for Manual Metal Arc (MMA Welding) Welding
- To know the materials used within Manual Metal Arc (MMA) Welding
- Be able to produce a butt weld in the PA flat position
- Be able to produce a multipass weld in the PB position

The first two objectives are covered in the NOCN training materials and the second two objectives are to be covered by the centre assessor.

Once the first two have been covered there is a workbook to be completed by the learner and assessed by the trainer/assessor of the centre. Once the trainer/assessor is delivered their own training on the second two objectives the learner would undertake two practical welds in simulated/test conditions.

Once the trainer/assessor is satisfied the learner is a competent MMA Welder, they can liaise with a welding body to complete the official coding.

### Course Delivery

As the knowledge element of this course is completed online, there are no maximum numbers of delegates for this short course. Only 4 delegates can undertake the practical at one time, which is a mandatory requirement to ensure safety. The course will be delivered over a suggested **6 week period** but this isn't mandatory and centres are responsible for ensuring sufficient delivery time to confirm candidates are working to the required welding standards.

The NOCN assured training resources must be used to deliver the training. To ensure that the most up-to-date material is being used **centres must download the material from the Document Manager platform each time, prior to delivery of a course**. All surplus training material must be destroyed after each occasion that a course has been run.

The structure of the training is provided by the course online e-learning course. Trainers are expected guide the candidates to use these resources to guarantee that delegates are witness to the total information required to successfully complete this course. The practical elements are then delivered in the classroom and workshop and trainers are responsible for ensuring the candidates understanding of the material before the assessments are completed.

### Assessment

This course is assessed by a workbook covering all of the knowledge and practical assessments to cover the skills. The workbook for the knowledge and the practical assessment for the skills can all be found on the NOCN platform

The delegates can attempt the workbook once they have completed the online learning, and it must be completed and signed off before the practical is attempted. The practical can only be attempted once the trainer/assessor is sure the delegate has been sufficiently taught and understands the H&S risks.

Assessment and certification is then completed by the trainer once the delegates have completed the course.

### Quality Assurance

The Quality Assurance requirements of Assured Course delivery can be found within the Assured Course Quality Manual, available on the NOCN website.

You will be allocated an NOCN EQA who will visit the centre in line with our quality policy. All centres must keep evidence of the assessments with photographs of the practical assessment for a minimum of 3 years for review.

### Progression

It is then recommended that centres work with a welding test centre to ensure the candidates have the opportunity to gain coding in the MMA process. NOCN through our experts can advise on this if needed.



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